

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicants:	Jeremy John Carroll	§	Art Unit:	2625
		§		
Serial No.:	10/632,132	§	Confirmation No.:	1834
		§		
Filed:	07/30/2003	§	Examiner:	Hilina S. Kassa
		§		
For:	RECONFIGURATION OF A COMPUTER-BASED PRINTING SYSTEM	§	Atty. Dkt. No.:	30980156-2 (HPC.0721US)
		§		
		§		

**Mail Stop Appeal Brief-Patents**

Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

**APPEAL BRIEF PURSUANT TO 37 C.F.R § 41.37**

Sir:

The final rejection of claims 1-14 and 18-23 is hereby appealed.

**I. REAL PARTY IN INTEREST**

The real party in interest is the Hewlett-Packard Development Company, LP. The Hewlett-Packard Development Company, LP, a limited partnership established under the laws of the State of Texas and having a principal place of business at 11445 Compaq Center Drive West, Houston, TX 77007, U.S.A. (hereinafter "HPDC"). HPDC is a Texas limited partnership and is a wholly-owned affiliate of Hewlett-Packard Company, a Delaware Corporation, headquartered in Palo Alto, CA. The general or managing partner of HPDC is HPQ Holdings, LLC.

**II. RELATED APPEALS AND INTERFERENCES**

None.

### **III. STATUS OF THE CLAIMS**

Claims 1-14 and 18-23 have been finally rejected and are the subject of this appeal.

Claims 15-17 have been cancelled.

### **IV. STATUS OF AMENDMENTS**

No amendment after the final rejection of January 21, 2009 has been submitted.

Therefore, all amendments have been entered.

### **V. SUMMARY OF THE CLAIMED SUBJECT MATTER**

The following provides a concise explanation of the subject matter defined in each of the independent claims involved in the appeal, referring to the specification by page and line number and to the drawings by reference characters, as required by 37 C.F.R. § 41.37(c)(1)(v). Each element of the claims is identified by a corresponding reference to the specification and drawings where applicable. Note that the citation to passages in the specification and drawings for each claim element does not imply that the limitations from the specification and drawings should be read into the corresponding claim element.

Independent claim 1 recites a method of printing at least one print job in a computer-based printer system, the system comprising at least one printer (Fig. 1:10, 11, 12) and at least one computer (Fig. 1:2, 3, 4) connected to said at least one printer, wherein the at least one printer has a plurality of different printing configurations (Spec., p. 11, ln. 3-10) at least one of which is manually configurable and the at least one computer is capable of generating said at least one print job, said at least one print job having corresponding printing requirements, each printing configuration being capable of satisfying one or more printing requirements, the method comprising the steps of using the printing system to:

i) create one or more print jobs (Spec., p. 13, ln. 9-21);

ii) determine whether or not the print job or each print job can be printed using said at least one printer by comparing the printing requirements of the print job or each print job and the current printing configurations of the at least one printer (Spec., p. 11, ln. 3-10; p. 13, ln. 23 – p. 14, ln. 4);

iii) when one or more of the print jobs cannot be printed using said at least one printer on the basis of said plurality of different printing configurations, automatically determining at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said one or more print job(s) (Spec., p. 11, ln. 3-10; p. 17, ln. 19 – p. 18, ln. 11); and

iv) performing such a reconfiguration of the printer configuration automatically or providing information to enable such a reconfiguration to be carried out manually (Spec., p. 4, ln. 3-9; p. 4, ln. 30 – p. 5, ln. 3; p. 11, ln. 6-10; p. 19, ln. 19-22; p. 20, ln. 8-21).

Independent claim 12 recites a computer-based printing system, the printing system comprising at least one printer (Fig. 1:10, 11, 12) and at least one computer (Fig. 1:2, 3, 4) connected to said printer(s), the or each printer having a plurality of different printing configurations (Spec., p. 11, ln. 3-10) at least one of which is manually configurable and the or each computer being capable of generating at least one print job, said print job(s) having corresponding printing requirements (Spec., p. 13, ln. 9-21), each printing configuration being capable of satisfying one or more printing requirements, wherein the printing system is arranged to:

determine whether or not each print job can be printed using said printer(s) by comparing the printing requirements of the or each print job and the current printing configurations of the printer(s) (Spec., p. 11, ln. 3-10; p. 13, ln. 23 – p. 14, ln. 4); and

when one or more of the print jobs cannot be printed using said printer(s) on the basis of said current printing configuration, to determine automatically at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said print job(s) (Spec., p. 11, ln. 3-10; p. 17, ln. 19 – p. 18, ln. 11); and when said reconfiguration would require manual reconfiguration of said printer(s) by a user of the printing system, then use the printing system to generate and present to said user instructions for manually reconfiguring said printer(s) prior to printing of the print job(s) by the printing system (Spec., p. 4, ln. 3-9; p. 4, ln. 30 – p. 5, ln. 3; p. 11, ln. 6-10).

Independent claim 13 recites a computer system (Fig. 1:2, 3, 4) programmed for providing print job information to printers connected to the computer system by a computer network, wherein one or more processors of the computer system are programmed to:

create a print job (Spec., p. 13, ln. 9-21);

determine whether or not the print job can be printed using one or more printers in communication with the computer system by comparing the printing requirements of the print job and the current printing configurations of the one or more printers (Spec., p. 11, ln. 3-10; p. 13, ln. 23 – p. 14, ln. 4);

when the print job cannot be printed using the one or more printers in their current printing configuration, automatically determine at least one reconfiguration of the one or more printers that would be capable of satisfying the printing requirements of said print job (Spec., p. 11, ln. 3-10; p. 17, ln. 19 – p. 18, ln. 11); and providing information to enable such a reconfiguration to be carried out by another (Spec., p. 4, ln. 3-9; p. 4, ln. 30 – p. 5, ln. 3; p. 11, ln. 6-10).

Independent claim 14 recites computer readable media having stored thereon a computer program containing code adapted to program one or more processors of a computer system to:

obtain current printing configurations of one or more printers (Fig. 1:10, 11, 12) in communication with the computer system;

determine whether or not a print job can be printed using such one or more printers by comparing the printing requirements of the print job and the current printing configuration of the one or more printers (Spec., p. 11, ln. 3-10; p. 13, ln. 23 – p. 14, ln. 4);

when the print job cannot be printed using the one or more printers in their current printing configuration, automatically determine at least one reconfiguration of the one or more printers that would be capable of satisfying the printing requirements of the print job (Spec., p. 11, ln. 3-10; p. 17, ln. 19 – p. 18, ln. 11); and perform such a reconfiguration of the one or more printers when such reconfiguration can be done automatically and providing information to enable such a reconfiguration to be carried out by another when such reconfiguration cannot be done automatically (Spec., p. 4, ln. 3-9; p. 4, ln. 30 – p. 5, ln. 3; p. 11, ln. 6-10; p. 19, ln. 19-22; p. 20, ln. 8-21).

## **VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

- A. Claim 14 was rejected under 35 U.S.C. § 112, ¶ 1.**
- B. Claim 14 was rejected under 35 U.S.C. § 101.**
- C. Claims 1-2, 5-14 and 18-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,348,971 (Owa) in view of U.S. Patent No. 5,918,988 (Van Oijen).**
- D. Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as unpatentable over Owa and Van Oijen and further in view of U.S. Patent No. 7,046,383.**

## **VII. ARGUMENT**

The claims do not stand or fall together. Instead, Appellant presents separate arguments for various independent and dependent claims. Each of these arguments is separately argued below and presented with separate headings and sub-headings as required by 37 C.F.R. § 41.37(c)(1)(vii).

- A. Claim 14 was rejected under 35 U.S.C. § 112, ¶ 1.**

### **1. Claim 14.**

Claim 14 was rejected under § 112, ¶ 1, as failing to comply with the written description requirement. Specifically, the Examiner argued that the phrase “computer readable media” used in claim 14 finds no support in the specification.

Appellant respectfully disagrees. Page 10 and Fig. 1 of the specification shows several personal computers 2, 3, 4, and explains that each personal computer has a system unit 14 and software running in each system unit 14 to perform various tasks. A person of ordinary skill in the art would understand that for software to function within a system unit of a computer, such software has to first be stored on computer readable media, such as memory. Therefore, a person

of ordinary skill in the art would understand that the personal computers as originally disclosed by the specification include computer storage media as recited in claim 14.

As stated by the M.P.E.P.:

What is conventional or well known to one of ordinary skill in the art need not be disclosed in detail. See *Hybritech Inc. v. Monoclonal Antibodies, Inc.*, 802 F.2d at 1384, 231 USPQ at 94. >See also *Capon v. Eshhar*, 418 F.3d 1349, 1357, 76 USPQ2d 1078, 1085 (Fed. Cir. 2005) (“The ‘written description’ requirement must be applied in the context of the particular invention and the state of the knowledge.... As each field evolves, the balance also evolves between what is known and what is added by each inventive contribution.”).< If a skilled artisan would have understood the inventor to be in possession of the claimed invention at the time of filing, even if every nuance of the claims is not explicitly described in the specification, then the adequate description requirement is met. See, e.g., *Vas-Cath*, 935 F.2d at 1563, 19 USPQ2d at 1116; *Martin v. Johnson*, 454 F.2d 746, 751, 172 USPQ 391, 395 (CCPA 1972) (stating “the description need not be in *ipsis verbis* [i.e., “in the same words”] to be sufficient”).

M.P.E.P. § 2163 (8<sup>th</sup> ed., Rev. 7), at 2100-180.

In view of the foregoing, it is respectfully submitted that written description support does exist in the specification for “computer readable media.” Therefore, reversal of the § 112, ¶ 1, rejection is respectfully requested.

**B. Claim 14 was rejected under 35 U.S.C. § 101.**

**1. Claim 14.**

Claim 14 was rejected under § 101 based on the allegation that claim 14 is directed to “non-functional descriptive material.” This assertion is incorrect.

Claim 14 specifically recites a computer program that is stored on computer readable media and that is adapted to program one or more processors of a computer system to perform the tasks recited in claim 14. Thus, it is clear that the computer program of claim 14 constitutes **functional** descriptive material. As provided by the MPEP § 2106.01, when functional description material is recorded on some computer-readable medium, it becomes structurally and functionally interrelated to the medium and will be statutory in most cases since use of technology permits the function of the descriptive material to be realized. MPEP § 2106.01, at 2100-17.

In view of the foregoing, it is respectfully submitted that claim 14 is clearly directed to statutory subject matter. Reversal of the § 101 rejection of claim 14 is respectfully requested.

**C. Claims 1-2, 5-14 and 18-23 were rejected under 35 U.S.C. § 103(a) as unpatentable over U.S. Patent No. 6,348,971 (Owa) in view of U.S. Patent No. 5,918,988 (Van Oijen).**

**1. Claims 1, 2, 5, 7-11, 14.**

It is respectfully submitted that the obviousness rejection of claim 1 over Owa and Van Oijen is erroneous. To make a determination under 35 U.S.C. § 103, several basic factual inquiries must be performed, including determining the scope and content of the prior art, and ascertaining the differences between the prior art and the claims at issue. *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 U.S.P.Q. 459 (1965). Moreover, as held by the U.S. Supreme Court, it is important to identify a reason that would have prompted a person of ordinary skill in the art to combine reference teachings in the manner that the claimed invention does. *KSR International Co. v. Teleflex, Inc.*, 127 S. Ct. 1727, 1741, 82 U.S.P.Q.2d 1385 (2007).

Even if Owa and Van Oijen could be hypothetically combined, the hypothetical combination of the references would not have disclosed or hinted at the following combination of elements of claim 1:

- iii) when one or more of the print jobs cannot be printed using said at least one printer on the basis of said plurality of different printing configurations, automatically determining at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said one or more print job(s); and
- iv) performing such a reconfiguration of the printer configuration automatically or providing information to enable such a reconfiguration to be carried out manually.

The Examiner conceded that Owa fails to disclose “automatically determining at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said one or more print job(s),” and “performing such a reconfiguration . . . .” 1/21/2009 Office Action at 9. Instead, the Examiner cited Van Oijen as purportedly disclosing the claim features missing from Owa.

In a column 2 passage of Van Oijen cited by the Examiner, Van Oijen notes that the printing system includes means for selectively printing print jobs in “in dependence on the job specifications of the other jobs.” Van Oijen, 2:7-10. The Examiner also cited column 5, lines 12-20, of Van Oijen, which refers to a user making various selections at a printer. A user can select various criteria of the printer and change the settings for such criteria. As explained by Van Oijen, when the user has completed the settings, the user can select an “OK” box to store the settings in a register. Van Oijen, 5:4-6. Van Oijen also allows a sub-menu to be presented to a user to allow the user to choose between an automatic print mode and a manual print mode. *Id.*, 5:14-16. If the manual print mode is selected by a user, then the printing system passes to the manual condition, where the user can select print jobs from the memory to print. *Id.*, 5:16-21.

The teaching in column 2 of Van Oijen regarding selectively printing print jobs dependent on the job specifications of other print jobs has nothing to do with the following subject matter of claim 1:

iii) when one or more of the print jobs cannot be printed using said at least one printer on the basis of said plurality of different printing configurations, automatically determining at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said one or more print job(s); and

Selectively printing a print job based on the job specifications of other jobs does not provide any hint of automatically determining at least one reconfiguration of a printer configuration.

Moreover, the teaching in column 5 of Van Oijen regarding the ability of a user to select between a manual print mode and an automatic print mode also has nothing to do with the above claimed feature of claim 1. A user selecting between automatic print mode and manual print mode is clearly not the same as “automatically determining at least one **reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of said one or more print job(s).**” User selection between manual print mode and automatic print mode merely refers to a condition of the printer relating to whether the printer is able to print jobs automatically or has to wait for user input before a job can be printed. Changing the manual versus automatic condition of the printer does not constitute automatically determining a reconfiguration of the printer configuration that would be capable of satisfying a printing requirement of a print job, when the print job cannot be printed using the printer on the basis of the current printing configurations.

Moreover, the teaching in Van Oijen of a user manually selecting between automatic print mode and manual print mode is contrary to the subject matter of claim 1, which recites **automatically determining at least one reconfiguration of a printer configuration.** Moreover,

claim 1 further recites that the reconfiguration of the printer can be performed automatically or information can be provided to enable such reconfiguration to be carried out manually. User selection of automatic print mode or manual print mode does not constitute performing a reconfiguration of the printer configuration **automatically**. Additionally, there is absolutely no teaching whatsoever in Van Oijen of providing information to enable the reconfiguration to be carried out manually. The user making a selection between the manual print mode and automatic print mode is clearly not based on information that is provided to enable reconfiguration of the printer configuration, as recited in claim 1.

In view of the foregoing, it is respectfully submitted that even if Owa and Van Oijen could be hypothetically combined, the hypothetical combination of the references would not have led to the claimed subject matter.

Moreover, a person of ordinary skill in the art clearly would not have been prompted to combine the teachings of Owa and Van Oijen to achieve the claimed subject matter. Owa specifically discloses that if a printer cannot satisfy a user print condition of a print job, then a printer is simply not selected. Owa, 5:54-60. Thus, Owa would have specifically led a person of ordinary skill in the art away from the claimed subject matter. In Owa, if a print job cannot be performed by a printer based on the requirements of the print job, then the printer is not selected. This teaching of Owa is inconsistent with the subject matter of claim 1, which specifically recites that a reconfiguration of the printer configuration is to be automatically determined such that the printing requirement of the one or more print jobs can be satisfied.

Moreover, as discussed above, Van Oijen also provides a teaching that would have led a person of ordinary skill in the art away from the claimed subject matter. Van Oijen discloses that a user can manually select between an automatic print mode and a manual print mode, where in

the manual print mode, a user can select print jobs to print. The manual selection between automatic print mode and manual print mode of Van Oijen is completely different from the subject matter of claim 1, which relates to automatically determining a reconfiguration of a printer configuration that would satisfy the printing requirement of a print job.

Since the teachings of Owa and Van Oijen would have led a person of ordinary skill in the art towards significantly different solutions, such person would not have been prompted to combine the teachings of Owa and Van Oijen to achieve the claimed subject matter. Therefore, the obviousness rejection of claim 1 and its dependent claims is in error.

The obviousness rejection of independent claim 14 and its dependent claims is also in error.

Reversal of the final rejection of the above claims is respectfully requested.

**2. Claim 6.**

Claim 6 depends from claim 1 and is therefore allowable for at least the same reasons as claim 1. Moreover, claim 6 further recites that there are a plurality of different preferred reconfigurations, and that prior to step (iv) these preferred configurations are presented to a user of the printing system so that the user can select a particular reconfiguration, for which reconfiguration instructions are then presented in step (iv). With respect to the subject matter of claim 6, the Examiner cited column 5, line 64 – column 6, line 5, of Owa. 1/21/2009 Office Action at 12-13. This passage of Owa states that an output destination printer selection section checks whether or not a printer not excluded remains, in other words, whether one or more printers can satisfy the user print conditions. The cited passage further notes that if no printers are selected, then control proceeds to display a message to the user indicating that none of the printers can be selected. Presenting a message that no printer is selected is completely different from presenting a plurality of different preferred reconfigurations to a user for selection by a user, and for which reconfiguration instructions are then presented.

Claim 6 is therefore further allowable for the foregoing reason.

Reversal of the final rejection of the above claim is respectfully requested.

**3. Claims 18, 19.**

Claim 18 depends from claim 1 and is therefore allowable for at least the same reasons as claim 1. Moreover, claim 18 further recites that the at least one reconfiguration of the printer configuration(s) capable of satisfying the printing requirement(s) of the print job(s) is determined by automatically analyzing a set of plausible reconfigurations. With respect to the subject matter of claim 18, the Examiner cited the following passage of Owa: column 7, line 67 – column 8,

line 4. This passage of Owa teaches that the output destination printer selection section checks whether or not any of the printers to be selected remain, and if no printers remain, a message is displayed indicating this status. Providing a message indicating that no printers remain is completely different from determining a reconfiguration of a printer configuration by analyzing a set of plausible reconfigurations, as recited in claim 18.

Therefore, claim 18 and its dependent claim are further allowable over Owa and Van Oijen for the foregoing reason.

Reversal of the final rejection of the above claims is respectfully requested.

**4. Claims 12, 13.**

Independent claim 12 is also allowable over Owa and Van Oijen for similar reasons as claim 1. Specifically, the hypothetical combination of Owa and Van Oijen clearly does not provide any teaching or hint of determining automatically at least one reconfiguration of the printer configuration(s) that would be capable of satisfying the printing requirement(s) of the print job(s), when one or more of the print jobs cannot be printed using the printer(s) on the basis of the current printing configuration.

Moreover, as noted above, Owa and Van Oijen clearly do not provide any teaching or hint of presenting to a user instructions for manually reconfiguring the printer(s) prior to printing of the print job(s).

In addition, a person of ordinary skill in the art would not have been prompted to combine the teachings of Owa and Van Oijen for the reasons stated above.

In view of the foregoing, it is respectfully submitted that the obviousness rejection of claim 12 and its dependent claims is clearly erroneous. Independent claim 13 and its dependent claims are allowable over Owa and Van Oijen for similar reasons.

Reversal of the final rejection of the above claims is respectfully requested.

**5. Claims 20-23.**

Claims 20-23 depend respectively from base claims 12 and 13, and are allowable for at least the same reasons as corresponding independent claims. Moreover, claims 20-23 are further allowable for reasons similar to those stated above with respect to claim 18.

Reversal of the final rejection of the above claims is respectfully requested.

**D. Claims 3 and 4 were rejected under 35 U.S.C. § 103(a) as unpatentable over Owa and Van Oijen and further in view of U.S. Patent No. 7,046,383 (Ueda).**

**1. Claims 3, 4.**

In view of the allowability of base claim 1 over Owa and Van Oijen, it is respectfully submitted that the obviousness rejection of dependent claims 3 and 4 over Owa, Van Oijen and Ueda has been overcome.

Reversal of the final rejection of the above claims is respectfully requested.

## CONCLUSION

In view of the foregoing, reversal of all final rejections and allowance of all pending claims is respectfully requested.

Respectfully submitted,

Date: June 22, 2009

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### **VIII. APPENDIX OF APPEALED CLAIMS**

The claims on appeal are:

1    1.    A method of printing at least one print job in a computer-based printer system, the system  
2    comprising at least one printer and at least one computer connected to said at least one printer,  
3    wherein the at least one printer has a plurality of different printing configurations at least one of  
4    which is manually configurable and the at least one computer is capable of generating said at  
5    least one print job, said at least one print job having corresponding printing requirements, each  
6    printing configuration being capable of satisfying one or more printing requirements, the method  
7    comprising the steps of using the printing system to:

8            i) create one or more print jobs;

9            ii) determine whether or not the print job or each print job can be printed using said at  
10   least one printer by comparing the printing requirements of the print job or each print job and the  
11   current printing configurations of the at least one printer;

12            iii) when one or more of the print jobs cannot be printed using said at least one printer on  
13   the basis of said plurality of different printing configurations, automatically determining at least  
14   one reconfiguration of the printer configuration(s) that would be capable of satisfying the  
15   printing requirement(s) of said one or more print job(s); and

16            iv) performing such a reconfiguration of the printer configuration automatically or  
17   providing information to enable such a reconfiguration to be carried out manually.

1    2.    A method as claimed in claim 1, wherein step iv) comprises determining when said  
2    reconfiguration would require manual reconfiguration of said one or more printer(s) by a user of  
3    the printing system, and if so using the printing system to generate and present to said user  
4    instructions for manually reconfiguring said one or more printer(s) prior to printing of the print  
5    one or more job(s) by the printing system.

1 3. A method as claimed in claim 1, in which the method involves prior to step iv) the steps  
2 of:

3 v) calculating an economic cost for effecting each of a plurality of possible  
4 reconfigurations for which the printer configuration(s) would be capable of satisfying the  
5 printing requirement(s) of said one or more print job(s); and

6 vi) selecting according to the calculated economic costs one or more preferred  
7 reconfigurations of said one or more printer(s) for which reconfiguration instructions will be  
8 presented to said user.

1 4. A method as claimed in claim 3, in which there are a plurality of preferred  
2 reconfigurations, and the reconfiguration information presented to said user includes the  
3 corresponding economic cost for each preferred configuration.

1 5. A method as claimed in claim 1, in which there are a plurality of different preferred  
2 reconfigurations which would involve both manual configuration by the user and automatic  
3 configuration by the printing system.

1 6. A method as claimed in claim 1, in which there are a plurality of different preferred  
2 reconfigurations, and prior to step iv) these preferred configurations are presented to user of the  
3 printing system so that the user can select a particular reconfiguration, for which reconfiguration  
4 instructions are then presented in step iv).

1 7. A method as claimed in claim 2, in which a computer includes a user display, and said  
2 presentation of instructions includes the display of reconfiguration instructions on the user  
3 display.

1 8. A method as claimed in claim 2, in which said presentation of instructions includes the  
2 printing of reconfiguration instructions on a printer.

1 9. A method as claimed in claim 8, in which a computer includes a user display; in which  
2 said presentation of instructions includes a message displayed on the user display informing the  
3 user that reconfiguration instructions are to be printed on said printer.

1 10. A method as claimed in claim 1, in which after reconfiguration of the printer(s), the print  
2 job is assigned to more than one printer, and the printing system presents to a user of the printing  
3 system instructions for any or all of locating, assembling, collating, binding, or otherwise  
4 combining material printed from the printers.

1 11. A method as claimed in claim 10, in which the print job has a plurality of different parts,  
2 each part having different printing requirements, and the print job is split according to those  
3 different requirements.

1 12. A computer-based printing system, the printing system comprising at least one printer  
2 and at least one computer connected to said printer(s), the or each printer having a plurality of  
3 different printing configurations at least one of which is manually configurable and the or each  
4 computer being capable of generating at least one print job, said print job(s) having  
5 corresponding printing requirements, each printing configuration being capable of satisfying one  
6 or more printing requirements, wherein the printing system is arranged to:

7 determine whether or not each print job can be printed using said printer(s) by comparing  
8 the printing requirements of the or each print job and the current printing configurations of the  
9 printer(s); and

10 when one or more of the print jobs cannot be printed using said printer(s) on the basis of  
11 said current printing configuration, to determine automatically at least one reconfiguration of the  
12 printer configuration(s) that would be capable of satisfying the printing requirement(s) of said  
13 print job(s); and when said reconfiguration would require manual reconfiguration of said  
14 printer(s) by a user of the printing system, then use the printing system to generate and present to  
15 said user instructions for manually reconfiguring said printer(s) prior to printing of the print  
16 job(s) by the printing system.

1 13. A computer system programmed for providing print job information to printers connected  
2 to the computer system by a computer network, wherein one or more processors of the computer  
3 system are programmed to:

4 create a print job;

5 determine whether or not the print job can be printed using one or more printers in  
6 communication with the computer system by comparing the printing requirements of the print  
7 job and the current printing configurations of the one or more printers;

8 when the print job cannot be printed using the one or more printers in their current  
9 printing configuration, automatically determine at least one reconfiguration of the one or more  
10 printers that would be capable of satisfying the printing requirements of said print job; and  
11 providing information to enable such a reconfiguration to be carried out by another.

1 14. Computer readable media having stored thereon a computer program containing code  
2 adapted to program one or more processors of a computer system to:

3 obtain current printing configurations of one or more printers in communication with the  
4 computer system;

5 determine whether or not a print job can be printed using such one or more printers by  
6 comparing the printing requirements of the print job and the current printing configuration of the  
7 one or more printers;

8 when the print job cannot be printed using the one or more printers in their current  
9 printing configuration, automatically determine at least one reconfiguration of the one or more  
10 printers that would be capable of satisfying the printing requirements of the print job; and

11 perform such a reconfiguration of the one or more printers when such reconfiguration can  
12 be done automatically and providing information to enable such a reconfiguration to be carried  
13 out by another when such reconfiguration cannot be done automatically.

1 18. A method as claimed in claim 1 wherein the at least one reconfiguration of the printer  
2 configuration(s) capable of satisfying the printing requirement(s) of said print job(s) is  
3 determined by automatically analyzing a set of plausible reconfigurations.

- 1 19. A method as claimed in claim 18 wherein the set of plausible reconfigurations is
- 2 determined by iterating through features associated with said one or more printers.
  
- 1 20. A computer-based printing system as claimed in claim 12 wherein the at least one
- 2 reconfiguration of the printer configuration(s) capable of satisfying the printing requirement(s) of
- 3 said print job(s) is determined by automatically analyzing a set of plausible reconfigurations.
  
- 1 21. A computer-based printing system 20 wherein the set of plausible reconfigurations is
- 2 determined by iterating through features associated with said one or more printers.
  
- 1 22. A computer system as claimed in claim 13 wherein the at least one reconfiguration of the
- 2 printer configuration(s) capable of satisfying the printing requirement(s) of said print job(s) is
- 3 determined by automatically analyzing a set of plausible reconfigurations.
  
- 1 23. A computer system 22 wherein the set of plausible reconfigurations is determined by
- 2 iterating through features associated with said one or more printers.

**IX. EVIDENCE APPENDIX**

None.

**X. RELATED PROCEEDINGS APPENDIX**

None.